

Insert new claims 26-38, as follows:

26. An oligonucleotide comprising a nucleotide sequence complementary to a primer, and a nucleotide repeat region downstream from said complementary sequence, wherein said nucleotide repeat region comprises at least one detectably labeled nucleotide, each of said at least one detectably labeled nucleotide containing the same detectable label, and wherein said nucleotide repeat region also comprises a plurality of nucleotides that are not detectably labeled.

27. The oligonucleotide of claim 26, wherein said detectable label comprises a fluorescent dye.

28. The oligonucleotide of claim 26, wherein said detectable label comprises a radiolabel.

29. The oligonucleotide of claim 28, wherein said radiolabel is ³²P.

30. The oligonucleotide of claim 26, which is single-stranded.

31. The oligonucleotide of claim 26, which is double-stranded.

32. The oligonucleotide of claim 26, which contains from about 20 to about 1000 total nucleotides.

33. An optimally labeled oligonucleotide, comprising a detectably labeled nucleic acid sequence and a nucleotide repeat region, wherein the nucleotide repeat region comprises at least one nucleotide that is conjugated to a detectable label, and a plurality of nucleotides that are not conjugated to a detectable label, wherein each of said at least detectably labeled nucleotides contains the same detectable label.

34. The oligonucleotide of claim 33, wherein said detectable label comprises a radiolabel.

35. The oligonucleotide of claim 34, wherein said radiolabel is ³²P.

36. The oligonucleotide of claim 33, which is single-stranded.

37. The oligonucleotide of claim 33, which is double-stranded.

38. The oligonucleotide of claim 33, which contains from about 20 to about 1000 total nucleotides.